FIG. 1

1 OBJECT

2 X-RAY TUBE

3 DIAPHRAGM

3a, 3b SHIELDING BODY

4 DIAPHRAGM VARYING UNIT

6 IMAGE PROCESSING UNIT

61 STATISTICAL DATA PROCESSING UNIT

62 LINE NOISE CORRECTION UNIT

7 IMAGE DISPLAY UNIT

8 ARM

9 X-RAY GENERATION UNIT

10 OPERATION UNIT

11 CONTROL UNIT

FIG. 2

X-RAY

3 DIAPHRAGM

OPENING

52,53 SHIELDED PORTION

51 EFFECTIVE VISUAL FIELD

~~FIG. 3~~

~~STEP 31: SET X-RAY CONDITION (FLUOROSCOPY) AND DIAPHRAGM POSITION~~

~~STEP 32: IRRADIATE OBJECT WITH X-RAYS~~

~~STEP 33: DETECT X-RAYS PASSED THROUGH OBJECT~~

~~STEP 34: PERFORM STATISTICAL PROCESSING ON DATA OF SHIELDED PORTION~~

~~STEP 35: PERFORM LINE NOISE CORRECTION PROCESSING ON FLUOROSCOPIC IMAGE~~

~~STEP 36: DISPLAY FLUOROSCOPIC IMAGE~~

~~FIG. 4~~

~~6 IMAGE PROCESSING UNIT~~

~~61 STATISTICAL DATA PROCESSING UNIT~~

~~62 LINE NOISE CORRECTION UNIT~~

~~63 CORRECTION EXECUTION SWITCHING UNIT~~

~~7 IMAGE DISPLAY UNIT~~

~~10 OPERATION UNIT~~

~~11 CONTROL UNIT~~

~~FIG. 5~~

~~STEP 51: SET X-RAY CONDITION (ARBITRARY) AND DIAPHRAGM POSITION~~

~~STEP 52: IRRADIATE OBJECT WITH X-RAYS~~

~~STEP 53: DETECT X-RAYS PASSED THROUGH OBJECT~~

~~STEP 54: X-RAY CONDITION = FLUOROSCOPY?~~

~~STEP 55: PERFORM STATISTICAL PROCESSING ON DATA OF SHIELDED PORTION~~

~~STEP 56: PERFORM LINE NOISE CORRECTION PROCESSING ON FLUOROSCOPIC IMAGE~~

~~STEP 57: DISPLAY X-RAY IMAGE~~

~~FIG. 6~~

~~6 IMAGE PROCESSING UNIT~~

~~61 STATISTICAL DATA PROCESSING UNIT~~

~~62 LINE NOISE CORRECTION UNIT~~

~~64 SCATTERED RAY ELIMINATION PROCESSING UNIT~~

~~7 IMAGE DISPLAY UNIT~~

~~10 OPERATION UNIT~~

~~11 CONTROL UNIT~~

~~FIG. 7~~

~~STEP 71: SET X-RAY CONDITION (FLUOROSCOPY) AND DIAPHRAGM POSITION~~

~~STEP 72: IRRADIATE OBJECT WITH X-RAYS IN ACCORDANCE WITH X-RAY CONDITION (FLUOROSCOPY) AT SET DIAPHRAGM POSITION~~

~~STEP 73: DETECT X-RAYS PASSED THROUGH OBJECT~~

~~STEP 74: SCATTERED X-RAY ELIMINATION?~~

~~STEP 75: ELIMINATE SCATTERED X-RAY PORTION FROM SHIELDED PORTION~~

STEP 76: PERFORM STATISTICAL PROCESSING ON DATA OF SHIELDED PORTION

STEP 77: PERFORM LINE NOISE CORRECTION PROCESSING ON FLUOROSCOPIC IMAGE

STEP 78: DISPLAY X-RAY IMAGE

FIG. 8

1 OBJECT

2 X-RAY TUBE

3 DIAPHRAGM

3a,3b SHIELDING BODY

4 DIAPHRAGM VARYING UNIT

6 IMAGE PROCESSING UNIT

61 STATISTICAL DATA PROCESSING UNIT

62 LINE NOISE CORRECTION UNIT

7 IMAGE DISPLAY UNIT

8 ARM

9 X-RAY GENERATION UNIT

10 OPERATION UNIT

11 CONTROL UNIT

12 DIAPHRAGM

FIG. 9

STEP 91: SET X-RAY CONDITION (RADIOGRAPHY) AND DIAPHRAGM POSITION OF FIRST DIAPHRAGM

STEP 92: IRRADIATE OBJECT TO BE EXAMINED WITH X-RAYS IN ACCORDANCE WITH X-RAY CONDITION (RADIOGRAPHY) AT SET DIAPHRAGM POSITION

STEP 93: DETECT X-RAYS PASSED THROUGH OBJECT TO BE EXAMINED

STEP 94: DETECT SHIELDED PORTION DATA OF FIRST DIAPHRAGM

STEP 95: IDENTIFY SCATTERED X-RAY PORTION

STEP 96: INSERT SECOND DIAPHRAGM INTO SCATTERED X-RAY PORTION

STEP 97: PERFORM STATISTICAL PROCESSING ON DATA OF SHIELDED PORTION

STEP 98: PERFORM LINE-NOISE CORRECTION PROCESSING ON FLUOROSCOPIC IMAGE

STEP 99: DISPLAY X-RAY IMAGE